



# AFCTN Report 94-110

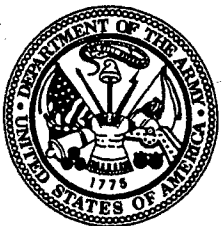
AFCTB-ID  
94-106



## Technical Raster Transfer Installation Drawing: Waveguide LPCR-130-2 Radar



Submitted By:  
Lockheed Aeronautical Systems



Supporting:  
WR-ALC/TILCA's EDCARS Program

Contract #F33657-90-C-0071-P00013BL2



MIL-STD-1840A  
MIL-R-28002A (Raster)

Quick Short Test Report

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**03 August 1994**

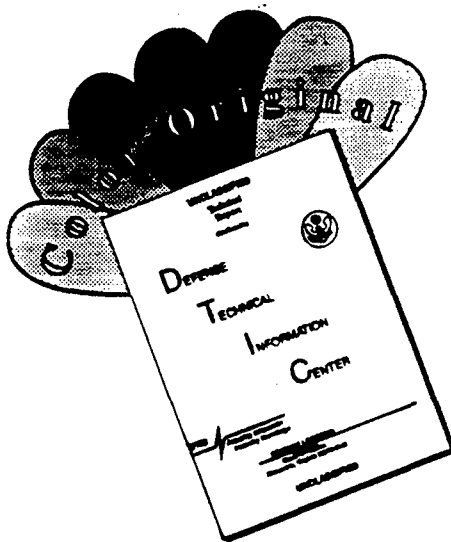
19960822 124



Prepared for  
Electronic Systems Center  
Air Force CALS Program Office  
HQ ESC/AV-2  
4027 Colonel Glenn Hwy Suite 300  
Dayton OH 45431-1672

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**MIL-STD-1840A  
MIL-R-28002A (Raster)**

**Quick Short Test Report**

**03 August 1994**

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**Prepared By**  
Air Force CALS Test Bed  
Wright-Patterson AFB, OH 45433

**AFCTB Contact**  
Gary Lammers  
(513) 427-2295

**AFCTN Contact**  
Mel Lammers  
(513) 427-2295

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# **Air Force CALS Test Bed**

## ***Notification of Test Results***

**03 August 1994**

This notice documents the results of an Air Force CALS Test Bed (AFCTB) Quick Short Test Report (QSTR) evaluation of data submitted by:

### **Lockheed Aeronautical Systems**

Identified as follows:

Title:	<b>Installation Drawings: Waveguide, LPCR-130-2-Radar</b>
Program:	<b>EDCARS</b>
Program Office:	<b>WR-ALC/TILCA</b>
Contract No.:	<b>F33657-90-C-0071-P00013BL2</b>
QSTR No.:	<b>AFCTB-ID 94-106</b>

Received on the following media:      **Two 9-Track Tapes**

The results of the QSTR evaluation are as follows:

MIL-STD-1840B Standard:	<b>Tape 1: Fail/Tape 2: Pass</b>
MIL-STD-1840B Media Format:	<b>Tape 1: Fail/Tape 2: Pass</b>
MIL-D-28000A IGES:	<b>N/A</b>
MIL-M-28001B SGML:	<b>N/A</b>
MIL-R-28002A Raster:	<b>Tape 1: Fail/Tape 2: Pass</b>
MIL-D-28003 CGM:	<b>N/A</b>

Formal results with associated disclaimer are documented and available from the AFCTB.

**Air Force CALS Test Bed  
HQ ESC/AV-2P  
4027 Colonel Glenn Highway, Suite 300  
Dayton, OH 45431-1672  
Phone: 513-257-3085      FAX: 513-257-5881**

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## 1. Introduction

### 1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

---



## 1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze Lockheed Aeronautical Systems' interpretation and use of the CALS standards in transferring technical Raster data. Lockheed used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff on a 9-track magnetic tape.

After the initial tape failed the evaluation, Lockheed Aeronautical System submitted a corrected 9-track magnetic tape.

## 2. Test Parameters

**Test Plan:** AFCTB 94-106

**Date of  
Evaluation:** 03 August 1994 - 1st Tape  
05 August 1994 - 2nd Tape

**Evaluator:** George Elwood  
Air Force CALS Test Bed  
DET 2 HQ ESC/AV-2P  
4027 Colonel Glenn Hwy  
Suite 300  
Dayton OH 45431-1672

**Data  
Originator:** Darlene Bittaker  
Lockheed Aeronautical Systems Company  
D/73-34, Zone 0318  
86 South Cobb Drive  
Marietta GA 30063  
(404) 494-4396

**Data  
Description:** Technical Raster Test  
29 Document Declaration files (2)  
80 Raster files (2)

**Data  
Source System:**

1840

**HARDWARE**

SPARC System 630 MP

**SOFTWARE**

FORMTEK CALS Delivery Proprietary Software

Raster

**HARDWARE**

SPARC System 630 MP

**SOFTWARE**

FORMTEK CALS Delivery Proprietary Software

**Evaluation Tools Used:**

**MIL-STD-1840A (TAPE)**

SUN 3/280

AFCTN Tapetool v1.2.10 UNIX

XSoft CAPS/CALS v40.4

**MIL-R-28002 (Raster)**

HP 735

AFCTN xrastb.hp

InterCAP X-Change v7.82

Carberry CADLeaf 3.1.2

SUN SparcStation 2

AFCTN validg4

AFCTN xrastb.sun4

IGES Data Analysis (IDA) IGESView v3.0

**Standards**

**Tested:**

MIL-STD-1840A

MIL-R-28002A

### **3. 1840A Analysis**

#### **3.1 External Packaging**

The first tape arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with a magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tape was not enclosed in a barrier bag or barrier sheet material, as required by MIL-STD-1840A, para. 5.3.1.2. The tape reel did not contain a label indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. Some 9-track tape units require this BPI to be set manually. A packing list showing all files recorded on the tape was not enclosed.

The second tape arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with a magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tape was enclosed in a barrier bag, as required by MIL-STD-1840A, para. 5.3.1.2. The tape reel did not contain a label indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. A packing list showing all files recorded on the tape was not enclosed.

#### **3.2 Transmission Envelope**

Both 9-track tapes received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

## 3.2.1 Tape Formats

### 3.2.1.1 Tape One

The first tape was run through the AFCTN *Tapetool* v1.2.10 utility. Thirty errors and 29 Notes were reported while evaluating the contents of the tape labels. All were "Invalid record size encountered" errors. See Appendix A, Section Two, of the Tape Import Log for a complete listing of these errors.

All of the errors relate to the tape label Record Length field for Type D files. Type D files contain variable length records that do not span blocks. All of the Type D files, the Declaration Files, written on the tape were flagged with an illegal value for Record Length. The AFCTN *Tapetool* is expecting a value of 260 in the Record Length field, but encountered a record length of 1. MIL-STD-1840A para. 5.2.1.3 requires the variable record size be a maximum of 256 bytes. ANSI X3.27 para. 7.2.3 further states that the length of a Record Control Word (RCW) must be included in a Measured Data Unit (MDU) record length computation. This adds four bytes to the 256 for a MDU total of 260 bytes. ANSI X3.27 para. 8.5.2.6 states that the Record Length field for Type D files shall contain the maximum length of a MDU. While MIL-STD-1840A permits variable length records, some software programs are sensitive to the number 260, because it is used to limit the record size when unblocking data. Some systems need this value to declare the maximum allowable record size as an attribute of a file when it is created.

Actual Block Size Found = 2048 Bytes.

\*\*\* I/O ERROR - Invalid Record Control Word encountered.  
Record Control Word contained an invalid record length.  
Record Control Word string =>  
\*\*\* NOTE - Remainder of file will be skipped.

Number of data blocks read = 1.

It was noted that no Document Declaration file data was present on the the first tape.

---

A note was reported on the tape label version. MIL-STD-1840A permits the use of both version three and four. The use of the most current standard should be used and noted.

An attempt to read the tape using XSoft's *CAPS read1840A* utility was unsuccessful. The utility stopped while trying to read the first file on the tape.

The media structure of the first tape does not meet the requirements define in MIL-STD-1840A and ANSI 3.27.

### 3.2.1.2 Tape Two

The second tape was run through the AFCTN *Tapetool v1.2.10* utility. No errors and one note was reported while evaluating the contents of the tape label. MIL-STD-1840A permits the use of both version three and four. The use of the most current standard should be used and noted.

An attempt was made to read the tape using XSoft's *CAPS read1840A* utility. This utility stopped after reading the first 20 Document Declaration files because of design limitation in the software. No data files were read.

The media structure of the second tape meets the requirements define in MIL-STD-1840A and ANSI 3.27.

## 3.2.2 Declaration and Header Fields

### 3.2.2.1 Tape One

The first tape contained 29 errors in the Document Declaration files and data file headers. No data was found in any of the 29 Declaration files. Because no data was found in the Declaration files, AFCTN's *Tapetool* did not evaluate the Raster files located in the tape.

Extracting Document Declaration Header Records...

\*\*\* ERROR (MIL-STD-1840A; 5.1) - Invalid number of header records.  
Expected = 15; Records read = 0  
from /cals/u1210/Set055/D001/D001\_HDR.

\*\*\* I/O ERROR - MIL-STD-1840A Document Declaration Header Records  
could not be extracted from  
/cals/u1210/Set055/D001/D001\_HDR

The CALS headers and Document Declaration files, from the first tape, do not meet the CALS MIL-STD-1840A requirements.

### 3.2.2.2 Tape Two

The second tape contained 218 errors and 218 notes in the Document Declaration files and data file headers. All of the errors and notes were reported for the "srcdocid" and "dstdocid" records. The AFCTN *Tapetool* will report an error if there is more than one space after the colon for any record, per MIL-STD-1840A, para. 5.1.1.2. The data contained in these records is correct, with the space being a valid character. The reported errors are not valid MIL-STD-1840A errors.

srcdocid: 3338432 98897 LG 00020002LMGEHN  
\*\*\* ERROR (MIL-STD-1840A; 5.1.1.2) - Value contains leading spaces.  
\*\*\* NOTE - Correction made in new Document Declaration Header File.

The CALS headers and Document Declaration files from the second tape meet the CALS MIL-STD-1840A requirements.

---

## 4. Raster Analysis

### 4.1 Tape One

The first tape contained 80 Raster files. All files were evaluated using the AFCTN *validg4* utility. This program reported all 80 files failed to meet the CALS MIL-R-28002A specification. The reported error was located on the first scan line.

```
wpafb2% validg4 D001R001 -stat
density      = 200
path length  = 6848
scan lines   = 8800
bit format   = MSB
```

```
error, scan length exceeds pel count
s=1 a0=6849 bstop=6848 pos=2
```

```
file = D001R001
```

When a dump of the Raster files was made, it was noted that the last record was not padded to the correct length. MIL-STD-1840A, para 5.2.1.6 says that a Raster file shall be written in block lengths of 2048 with the data starting in the second block. The data for a Raster file should start at location 4000 in the screen dump shown below.

```
0001600  r o r i e n t : sp 0 9 0 , 2 7 0
0001620  sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp
*
0002000  r p e l c n t : sp 0 0 6 8 4 8 ,
0002020  0 0 8 8 0 0 sp sp sp sp sp sp sp sp sp sp sp
0002040  sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp
*
0002200  r d e n s t y : sp 0 2 0 0 sp sp sp
0002220  sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp
*
0002400  n o t e s : sp N / A sp sp sp sp sp sp
0002420  sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp sp
*
0002600  del del del del del del del del del del del del del e gs
0002620  M dc4 " dc4 bs " " nl [ % d : # em v a
```



---

```
0002640 dcl  c  bs  so  d  q dcl  Q  gs dcl  b  :  # etx enq  H
0002660  so  bs  a stx  8  g  #  D  t  G dc4  8  0  G dle  so
0002700  d  p  S  # soh  h  @  (  . bel  `  bs dle  8  ht etx
0002720  C  8  d  A  I  so  g  8  e  so  P  d can  fs can  e
0002740  so  a  J  C  9  P  L  r nul  | bel  Y enq enq  ;  "
0002760  9 can stx  2  `  x  m etb ack  ht  C  bs  bs  b  "  "
```

Because the file structure was incorrect none of the Raster viewers, in the AFCTB, would read the files.

The Raster files on tape one do not meet the CALS MIL-R-28002A specification.

## 4.2 Tape Two

The second tape contained 80 Raster files. Due to the number of files, a sample of the files was evaluated. The AFCTB has several tools for viewing Raster files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The files were evaluated using the AFCTN *validg4* utility. This program reported that all of the files sampled meet the CALS MIL-R-28002A specification.

The tape was constructed with 29 documents. Each document consisted of one to four Raster files, and one drawing.

The files were read into the AFCTN *xrastb.sun4* viewing utility. No problems were noted.

The files were read into Carberry's *CADLeaf* software without a reported error. The images were displayed and printed.

The files were read using IDA's *CALSVIEW* without a reported error.

The files were read into IDA's *IGESVIEW* and *IGESVIEW for Windows* without a reported error.

The files were read into Inset Systems' *HiJaak for Windows* without a reported error.

The files were read using InterCAP's *X-Change* without a reported error.

The files were imported into Expert Graphics' *RxHighlight* and displayed without a reported error.

The Raster files included on the second tape meet the CALS MIL-R-28002A specification.

## **5. IGES Analysis**

No Initial Graphics Exchange Specification (IGES) files were included in this evaluation.

## **6. SGML Analysis**

No Standard Generalized Markup Language (SGML) files were included in this evaluation.

## **7. CGM Analysis**

No Computer Graphics Metafiles (CGMs) were included in this evaluation.

## 8. Conclusions and Recommendations

### 8.1 Tape One

The first tape from Lockheed Aeronautical Systems Company was not correctly written. The tape had errors which prevented the commercial tape utilities from reading it. The AFCTB Tapetool reported many errors in the physical structure and CALS headers. No Document Declaration files were written to the tape. This portion of the tape does not meet the CALS MIL-STD-1840A requirements.

The errors with the Raster images were serious. The construction of the Raster files appeared to be flawed resulting with unusable files. The data files did not start at the correct location, this prevented all software products from reading and displaying the files. The Raster files on the first tape do not meet the CALS MIL-R-28002A specification.

The first tape submitted by Lockheed Aeronautical Systems Company does not meet the CALS MIL-STD-1840A requirements.

### 8.2 Tape Two

The structure and CALS headers of the second tape had no valid reported errors or warning. This portion of the tape meets the CALS MIL-STD-1840A requirements.

The Raster files meet the CALS MIL-R-28002A specification.

The second tape submitted by Lockheed Aeronautical Systems Company meets the CALS MIL-STD-1840A requirements.

## 9. Appendix A - Tapetool Report Logs

### 9.1 Tape One

#### 9.1.1 Tape Catalog

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes  
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Wed Aug 3 11:31:18 1994

MIL-STD-1840A File Catalog

File Set Directory: /cals/u1210/Set055

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00260	02048/000001	Selected
D002	Document Declaration	D/00260	02048/000001	Selected
D003	Document Declaration	D/00260	02048/000001	Selected

<<<< PART OF LOG FILE REMOVED HERE >>>>

D029	Document Declaration	D/00260	02048/000001	Selected
D001R001	Raster	F/00128	02048/000086	Extracted
D001R002	Raster	F/00128	02048/000091	Extracted
D002R001	Raster	F/00128	02048/000034	Extracted
D002R002	Raster	F/00128	02048/000054	Extracted

<<<< PART OF LOG FILE REMOVED HERE >>>>

D028R001	Raster	F/00128	02048/000101	Extracted
D029R001	Raster	F/00128	02048/000042	Extracted

Catalog Process terminated normally.

---

## 9.1.2 Tape Evaluation Log

CALS Test Network Tape Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes  
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Wed Aug 3 11:26:08 1994

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1L00801

3

Label Identifier: VOL1

Volume Identifier: L00801

Volume Accessibility:

Owner Identifier:

Label Standard Version: 3

\*\*\* NOTE (ANSI X3.27; 8.3.1.8) - The Label Standard Version  
should be 4 to represent the current level of ANSI X3.27.

HDR1D001 L0080100010001000100 94027 95027 000000EDCARS

Label Identifier: HDR1

File Identifier: D001

File Set Identifier: L00801

File Section Number: 0001

File Sequence Number: 0001

Generation Number: 0001

Generation Version Number: 00

Creation Date: 94027

Expiration Date: 95027

File Accessibility:

Block Count: 000000

Implementation Identifier: EDCARS

HDR2D0204800260

00

Label Identifier: HDR2  
Recording Format: D  
Block Length: 02048  
Record Length: 00260  
Offset Length: 00

\*\*\*\*\* Tape Mark \*\*\*\*\*

Actual Block Size Found = 2048 Bytes.

\*\*\* I/O ERROR - Invalid Record Control Word encountered.  
Record Control Word contained an invalid record length.  
Record Control Word string =>  
\*\*\* NOTE - Remainder of file will be skipped.

Number of data blocks read = 1.

\*\*\*\*\* Tape Mark \*\*\*\*\*

EOF1D001 L0080100010001000100 94027 95027 000001EDCARS

Label Identifier: EOF1  
File Identifier: D001  
File Set Identifier: L00801  
File Section Number: 0001  
File Sequence Number: 0001  
Generation Number: 0001  
Generation Version Number: 00  
Creation Date: 94027  
Expiration Date: 95027  
File Accessibility:  
Block Count: 000001  
Implementation Identifier: EDCARS

EOF2D0204800260

00

Label Identifier: EOF2  
Recording Format: D  
Block Length: 02048  
Record Length: 00260  
Offset Length: 00

\*\*\*\*\* Tape Mark \*\*\*\*\*

<<<< PART OF LOG FILE REMOVED HERE >>>>

---

HDR1D029                    L0080100010029000100 94027 95027 000000EDCARS

Label Identifier: HDR1  
File Identifier: D029  
File Set Identifier: L00801  
File Section Number: 0001  
File Sequence Number: 0029  
Generation Number: 0001  
Generation Version Number: 00  
Creation Date: 94027  
Expiration Date: 95027  
File Accessibility:  
Block Count: 000000  
Implementation Identifier: EDCARS

HDR2D0204800260

00

Label Identifier: HDR2  
Recording Format: D  
Block Length: 02048  
Record Length: 00260  
Offset Length: 00

\*\*\*\*\* Tape Mark \*\*\*\*\*

Actual Block Size Found = 2048 Bytes.

\*\*\* I/O ERROR - Invalid Record Control Word encountered.  
Record Control Word contained an invalid record length.  
Record Control Word string =>  
\*\*\* NOTE - Remainder of file will be skipped.

Number of data blocks read = 1.

\*\*\*\*\* Tape Mark \*\*\*\*\*

EOF1D029                    L0080100010029000100 94027 95027 000001EDCARS

Label Identifier: EOF1  
File Identifier: D029  
File Set Identifier: L00801  
File Section Number: 0001  
File Sequence Number: 0029  
Generation Number: 0001  
Generation Version Number: 00  
Creation Date: 94027  
Expiration Date: 95027  
File Accessibility:  
Block Count: 000001  
Implementation Identifier: EDCARS

---

EOF2D0204800260

00

Label Identifier: EOF2  
Recording Format: D  
Block Length: 02048  
Record Length: 00260  
Offset Length: 00

\*\*\*\*\* Tape Mark \*\*\*\*\*

HDR1D001R001            L0080100010030000100 94027 95027 000000EDCARS

Label Identifier: HDR1  
File Identifier: D001R001  
File Set Identifier: L00801  
File Section Number: 0001  
File Sequence Number: 0030  
Generation Number: 0001  
Generation Version Number: 00  
Creation Date: 94027  
Expiration Date: 95027  
File Accessibility:  
Block Count: 000000  
Implementation Identifier: EDCARS

HDR2F0204800128

00

Label Identifier: HDR2  
Recording Format: F  
Block Length: 02048  
Record Length: 00128  
Offset Length: 00

\*\*\*\*\* Tape Mark \*\*\*\*\*

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 86.

\*\*\*\*\* Tape Mark \*\*\*\*\*

EOF1D001R001            L0080100010030000100 94027 95027 000086EDCARS

Label Identifier: EOF1  
File Identifier: D001R001  
File Set Identifier: L00801  
File Section Number: 0001  
File Sequence Number: 0030



---

Generation Number: 0001  
Generation Version Number: 00  
Creation Date: 94027  
Expiration Date: 95027  
File Accessibility:  
Block Count: 000086  
Implementation Identifier: EDCARS

EOF2F0204800128

00

Label Identifier: EOF2  
Recording Format: F  
Block Length: 02048  
Record Length: 00128  
Offset Length: 00

\*\*\*\*\* Tape Mark \*\*\*\*\*

<<<<< PART OF LOG FILE REMOVED HERE >>>>>

\*\*\*\*\* Tape Mark \*\*\*\*\*

\*\*\*\*\* Tape Mark \*\*\*\*\*

##### End of Volume L00801 #####

##### End Of Tape File Set #####

Deallocating /dev/rmt0...

Tape Import Process terminated with 30 error(s), 0 warning(s),  
and 29 note(s).

---

### 9.1.3 Tape File Set Validation Log

CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Wed Aug 3 11:31:19 1994

MIL-STD-1840A File Set Evaluation Log

File Set: Set055

Found file: D001

Extracting Document Declaration Header Records...

\*\*\* ERROR (MIL-STD-1840A; 5.1) - Invalid number of header records.  
Expected = 15; Records read = 0  
from /cals/u1210/Set055/D001/D001\_HDR.

\*\*\* I/O ERROR - MIL-STD-1840A Document Declaration Header Records  
could not be extracted from  
/cals/u1210/Set055/D001/D001\_HDR

Found file: D002

Extracting Document Declaration Header Records...

\*\*\* ERROR (MIL-STD-1840A; 5.1) - Invalid number of header records.  
Expected = 15; Records read = 0  
from /cals/u1210/Set055/D002/D002\_HDR.

\*\*\* I/O ERROR - MIL-STD-1840A Document Declaration Header Records  
could not be extracted from  
/cals/u1210/Set055/D002/D002\_HDR

Found file: D003

Extracting Document Declaration Header Records...

\*\*\* ERROR (MIL-STD-1840A; 5.1) - Invalid number of header records.  
Expected = 15; Records read = 0  
from /cals/u1210/Set055/D003/D003\_HDR.

\*\*\* I/O ERROR - MIL-STD-1840A Document Declaration Header Records  
could not be extracted from  
/cals/u1210/Set055/D003/D003\_HDR

<<<< PART OF LOG FILE REMOVED HERE >>>>

Found file: D029

Extracting Document Declaration Header Records...

\*\*\* ERROR (MIL-STD-1840A; 5.1) - Invalid number of header records.  
Expected = 15; Records read = 0  
from /cals/u1210/Set055/D029/D029\_HDR.

\*\*\* I/O ERROR - MIL-STD-1840A Document Declaration Header Records  
could not be extracted from  
/cals/u1210/Set055/D029/D029\_HDR

A grand total of 29 error(s), 0 warning(s), and 0 note(s) were  
encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

## 9.1.4 Other Tape Reading Logs

/cals/caps/Bin/read1840A: --- Read declaration file 'D001' ---  
/cals/caps/Bin/read1840A: file error: expected 'srcdocid...', saw '94106/  
1840Aread.log'

## 9.2 Tape Two

### 9.2.1 Tape Catalog

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

- MIL-STD-1840A (1987) - Automated Interchange of Technical Information
- ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes  
for Information Interchange
- ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Fri Aug 5 13:49:14 1994  
MIL-STD-1840A File Catalog  
File Set Directory: /cals/u1210/Set056

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00256	02048/000001	Extracted
*** NOTE (MIL-STD-1840A; 5.2.1.3) - Unexpected maximum variable record size encountered. Header => 256, Expected => 260				
*** NOTE (ANSI X3.27; 8.5.2.6) - Record Length for Recording Format Type D shall be the maximum length of a Measured Data Unit (MDU).				
*** NOTE (ANSI X3.27; 7.2.3) - A variable length record shall be contained in an MDU. An MDU consists of a four byte Record Control Word (RCW) followed immediately by the variable record.				
*** NOTE (ANSI X3.4) - A Record Control Word shall consist of four characters that express the sum of the lengths of the RCW and the variable record.				

<<<< PART OF LOG FILE REMOVED HERE >>>>

D029	Document Declaration	D/00256	02048/000001	Extracted
*** NOTE (MIL-STD-1840A; 5.2.1.3) - Unexpected maximum variable record size encountered. Header => 256, Expected => 260				
D001R001	Raster	F/00128	02048/000086	Extracted

<<<< PART OF LOG FILE REMOVED HERE >>>>

D029R001	Raster	F/00128	02048/000042	Extracted
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Catalog Process terminated with 0 error(s), 0 warning(s), and 32 note(s).

---

## 9.2.2 Tape Evaluation Log

CALS Test Network Tape Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes  
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Fri Aug 5 13:44:07 1994

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1L00801

3

Label Identifier: VOL1  
Volume Identifier: L00801  
Volume Accessibility:  
Owner Identifier:  
Label Standard Version: 3

\*\*\* NOTE (ANSI X3.27; 8.3.1.8) - The Label Standard Version  
should be 4 to represent the current level of ANSI X3.27.

HDR1D001 L0080100010001000100 94027 95027 000000EDCARS

Label Identifier: HDR1  
File Identifier: D001  
File Set Identifier: L00801  
File Section Number: 0001  
File Sequence Number: 0001  
Generation Number: 0001  
Generation Version Number: 00  
Creation Date: 94027  
Expiration Date: 95027  
File Accessibility:  
Block Count: 000000  
Implementation Identifier: EDCARS

<<<< PART OF LOG FILE REMOVED HERE >>>>

Tape Import Process terminated with 0 error(s), 0 warning(s),  
and 1 note(s).

---

## 9.2.3 Tape File Set Validation Log

CALS Test Network File Set Evaluation - Version 1.2; Release 10 (C)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Fri Aug 5 13:49:15 1994

MIL-STD-1840A File Set Evaluation Log

File Set: Set056

Found file: D001

Extracting Document Declaration Header Records...

Evaluating Document Declaration Header Records...

srcsys: LASC

srcdocid: 3338432 98897 LG 00020002LMGEHN

\*\*\* ERROR (MIL-STD-1840A; 5.1.1.2) - Value contains leading spaces.

\*\*\* NOTE - Correction made in new Document Declaration Header File.

srcrelid: NONE

chglvl: ORIGINAL

dteis: 19921104

dstsys: EDCARS, WR-ALC/TILCA

dstdocid: 3338432 98897 LG 00020002LMGEHN

\*\*\* ERROR (MIL-STD-1840A; 5.1.1.2) - Value contains leading spaces.

\*\*\* NOTE - Correction made in new Document Declaration Header File.

dstrelid: NONE

dtetrn: 19940127

dlvacc: F33657-90-C-0071-P00013-BL2

filcnt: R2

ttlcls: Unclass

doccls: Unclass

doctyp: INSTL DWG

docttl: WAVEGUIDE INSTALLATION LPCR-130-2 RADAR

2 error(s), 0 warning(s), and 2 note(s) were encountered  
in Document Declaration File D001.

Found file: D001R001

Extracting Raster Header Records...

Evaluating Raster Header Records...

srcdocid: 3338432 98897 LG 00010002LMGEHN  
\*\*\* ERROR (MIL-STD-1840A; 5.1.4) - Value contains leading spaces.  
\*\*\* NOTE - Correction made in new Raster Header File.

dstdocid: 3338432 98897 LG 00010002LMGEHN  
\*\*\* ERROR (MIL-STD-1840A; 5.1.4) - Value contains leading spaces.  
\*\*\* NOTE - Correction made in new Raster Header File.

txtfilid: NONE  
figid: NONE  
srcgph: NONE  
doccls: Unclass  
rtype: 1  
rorient: 090,270  
rpelcnt: 006848,008800  
rdensty: 0200  
notes: NONE

2 error(s), 0 warning(s), and 2 note(s) were encountered  
in Raster File D001R001.

Saving Raster Header File: D001R001\_HDR  
Saving Raster Data File: D001R001\_GR4

Found file: D001R002  
Extracting Raster Header Records...  
Evaluating Raster Header Records...

srcdocid: 3338432 98897 LG 00020002LMGEHN  
\*\*\* ERROR (MIL-STD-1840A; 5.1.4) - Value contains leading spaces.  
\*\*\* NOTE - Correction made in new Raster Header File.  
dstdocid: 3338432 98897 LG 00020002LMGEHN  
\*\*\* ERROR (MIL-STD-1840A; 5.1.4) - Value contains leading spaces.  
\*\*\* NOTE - Correction made in new Raster Header File.

txtfilid: NONE  
figid: NONE  
srcgph: NONE  
doccls: Unclass  
rtype: 1  
rorient: 090,270  
rpelcnt: 006848,008800  
rdensty: 0200  
notes: NONE

2 error(s), 0 warning(s), and 2 note(s) were encountered  
in Raster File D001R002.

Saving Raster Header File: D001R002\_HDR  
Saving Raster Data File: D001R002\_GR4

---

Evaluating numbering scheme...

No errors were encountered during numbering scheme evaluation.  
Numbering scheme evaluation complete.

Checking file count...

No errors were encountered during file count verification.  
File Count verification complete.

A total of 6 error(s), 0 warning(s), and 6 note(s) were  
encountered in Document D001.

<<<<< PART OF LOG FILE REMOVED HERE >>>>>

Found file: D029

Extracting Document Declaration Header Records...

Evaluating Document Declaration Header Records...

srcsys: LASC

srcdocid: 697183 98897 G LG 00010001UMGEHN

\*\*\* ERROR (MIL-STD-1840A; 5.1.1.2) - Value contains leading spaces.

\*\*\* NOTE - Correction made in new Document Declaration Header File.

srcrelid: NONE

chglvl: G,1,19600208

dteisu: 19920814

dstsys: EDCARS, WR-ALC/TILCA

dstdocid: 697183 98897 G LG 00010001UMGEHN

\*\*\* ERROR (MIL-STD-1840A; 5.1.1.2) - Value contains leading spaces.

\*\*\* NOTE - Correction made in new Document Declaration Header File.

dstrelid: NONE

dtetrn: 19940127

dlvacc: F33657-90-C-0071-P00013-BL2

filcnt: R1

ttlcls: Unclass

doccls: Unclass

doctyp: DETAIL DWG

doctl: ACTUATOR, LINEAR- 4.0 INCH STROKE, 28 VDC

2 error(s), 0 warning(s), and 2 note(s) were encountered  
in Document Declaration File D029.

Found file: D029R001

Extracting Raster Header Records...

Evaluating Raster Header Records...

srcdocid: 697183 98897 G LG 00010001UMGEHN

\*\*\* ERROR (MIL-STD-1840A; 5.1.4) - Value contains leading spaces.

\*\*\* NOTE - Correction made in new Raster Header File.



dstdocid: 697183 98897 G LG 00010001UMGEHN  
\*\*\* ERROR (MIL-STD-1840A; 5.1.4) - Value contains leading spaces.  
\*\*\* NOTE - Correction made in new Raster Header File.

txtfilid: NONE  
figid: NONE  
srcgph: NONE  
doccls: Unclass  
rtype: 1  
rorient: 090,270  
rpelcnt: 006848,008800  
rdensty: 0200  
notes: NONE

2 error(s), 0 warning(s), and 2 note(s) were encountered  
in Raster File D029R001.  
Saving Raster Header File: D029R001\_HDR  
Saving Raster Data File: D029R001\_GR4

Evaluating numbering scheme...  
No errors were encountered during numbering scheme evaluation.  
Numbering scheme evaluation complete.

Checking file count...  
No errors were encountered during file count verification.  
File Count verification complete.

A total of 4 error(s), 0 warning(s), and 4 note(s) were  
encountered in Document D029.

A grand total of 218 error(s), 0 warning(s), and 218 note(s) were  
encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

## 9.2.4 Other Tape Reading Logs

/cals/caps/Bin/read1840A: --- Read declaration file 'D001' ---  
/cals/caps/Bin/read1840A: --- Read declaration file 'D002' ---

<<<<< PART OF LOG FILE REMOVED HERE >>>>>

/cals/caps/Bin/read1840A: --- Read declaration file 'D019' ---  
/cals/caps/Bin/read1840A: --- Read declaration file 'D020' ---  
/cals/caps/Bin/read1840A: maximum number of documents (20) exceeded.

## 10.1 File D001R001



## 10.2 File D001R002

